

What is claimed is:

1. A projector comprising:

an image generating device for generating an image;

a housing having said image generating device disposed therein
and having an opening defined therein for emitting therethrough projection light
5 representing the image from said image generating device;

a projection mirror mounted on an outer surface of said housing
for reflecting said projection light to project the image onto a projection surface;

optical means disposed in said opening for applying said projec-
tion light to said projection mirror; and

10 foreign matter detecting means for detecting foreign matter
which enters a light path of the projection light between said optical means and
said projection mirror.

2. A projector according to claim 1, wherein said optical means
comprises a projection lens for projecting said projection light or a projection
mirror for reflecting said projection light.

3. A projector according to claim 1, wherein said foreign matter
detecting means is disposed in said opening.

4. A projector according to claim 1, wherein said opening defined
in said housing has a sealed interior.

5. A projector according to claim 1, wherein said foreign matter
detecting means comprises:

a light-emitting element for emitting detection light across said light path of the projection light;

5 a plurality of detection mirrors for reflecting said detection light across said light path of the projection light;

a light-detecting element for detecting said detection light which has been reflected by said detection mirrors; and

10 an electric circuit for controlling the projector in response to an output signal, from said light-detecting element.

6. A projector according to claim 5, wherein said light-emitting element comprises a semiconductor light-emitting device for emitting detection light having a wavelength different from the wavelength of said projection light.

7. A projector according to claim 5, wherein said light-detecting element comprises a semiconductor light-detecting device.

8. A projector according to claim 5, wherein said detection mirrors are disposed in confronting relation to each other across said light path of the projection light.

9. A projector according to claim 5, wherein said detection mirrors comprise two detection mirrors which are disposed in confronting relation to each other across said light path of the projection light, for reflecting said detection light in multiple paths therebetween.

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10. A projector according to claim 5, wherein said electric circuit comprises:

a detecting circuit for detecting said detection light in response to the output signal from said light-detecting element;

5 a lamp control circuit for turning on and off a light source lamp which emits said projection light, in response to an output signal from said detecting circuit;

10 a timer circuit for monitoring the output signal from said detecting circuit at a predetermined period of time to determine whether the projector is in a dangerous situation or not; and

 a power supply control circuit for turning on and off a power supply of the projector in response to the determination made by said timer circuit.